

5 TITLE OF THE INVENTION

COMPLEX SHAPED ARTICLES AND METHOD OF MANUFACTURE

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ABSTRACT OF THE DISCLOSURE

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Complex shaped articles and a method for their manufacture are disclosed.

The complex shaped articles comprise a one piece, honeycomb core material that can be conformally shaped for aerodynamic and hydrodynamic movement having formed edges and an outer skin bonded to its top and bottom surfaces to protect and encase the honeycomb core material and provide a drag resistant surface.

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The method for manufacturing the disclosed complex shaped articles comprises: trimming, cutting and shaping a honeycomb core material to a desired size and shape; deforming the sized and shaped honeycomb core material; permanently setting the shape and contour of the sized and shaped honeycomb core material; affixing side edges to the shaped and contoured honeycomb core material; and, bonding a fiber reinforced resin to the top and bottom surfaces of the honeycomb core material.